Patty Limerick
Center of the American West

The History of Oil Shale Development & What it Means for the Future

The Promise & Peril of Oil Shale
NRLC Symposium
February 5, 2010
“Our next speaker looked into the abyss and made a few notes.”
“Daddy works in a magical, faraway land called Academia.”
“I take the fun out of everything. What do you do?”
Early History

Ruins of the old Mormon Retort near Levan, Juab County, Utah, photographed in 1916. Built by Mormon pioneers roughly 60 years earlier, it was the first known oil shale operation in the Rocky Mountain West, extracting as much as a barrel of oil a day from the surrounding rocks for use in dressing leather harnesses, lubricating wagon wheel axels, and lighting lamps. (Credit: USGS)
The First Boom
c. 1916-1929

Federal Encouragement...

USGS surveyors sampling a shale outcrop in Sweetwater Country, Wyoming, 1914. (Credit: USGS)
The First Boom
c. 1916-1929

Federal Encouragement...

“It is now possible to work selected deposits of shale in [economic] competition with the oil from oil wells, and that these oil-shale reserves can be considered of immediate importance to the oil industry and to the defense of the nation.”

Franklin K. Lane
Secretary of the Interior
1917

USGS surveyors sampling a shale outcrop in Sweetwater Country, Wyoming, 1914. (Credit: USGS)
The First Boom
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Federal Encouragement… … Prompts an Oil Shale Boom

First oil shale retort in Colorado, 1918. Built by the Oil Shale Mining Company on Dry Fork west of De Beque, Garfield Country. (Credit: USGS)

USGS surveyors sampling a shale outcrop in Sweetwater Country, Wyoming, 1914. (Credit: USGS)
Key Legislation
Stock Raising Homestead Act of 1916
Mineral Leasing Act of 1920

Parachute Creek, 1916: Bands of oil shale visible on the mountainside drew prospectors, while homesteaders tried to make a go of it along the bottomlands. (Credit: USGS)
Ruins of the First Boom: When the first oil shale boom went bust in the 1920s, companies abandoned Shale Country as quickly as they had appeared, leaving the ruins of retorts such as this one on Willow Creek southwest of Vernal, Utah, as monuments to their failed efforts. (Credit: NETL)
Aerial view of the Anvil Points oil shale research mine near Rifle, Colorado, operated by the US Bureau of Mines from 1947 to 1956. (Credit: Russell / US Bureau of Mines)
Prelude to a Boom
Arab Oil Embargo 1973-74

Lines at the gas pump in San Francisco during the Arab Oil Embargo.
(Credit: Susan Ehmer, Chronicle, 1974)
Slow Departure from the Gate

QuickTime™ and a decompressor are needed to see this picture.

Regulatory Revolution

WILDERNESS ACT - 1964

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Regulatory Revolution

WILDERNESS ACT - 1964
CLEAN AIR ACT - 1970
NATIONAL ENVIRONMENTAL POLICY ACT - 1970

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ENDANGERED SPECIES ACT - 1973
SAFE DRINKING WATER ACT - 1974
FEDERAL LANDS POLICY AND MANAGEMENT ACT - 1976

President Jimmy Carter explained his energy strategy to the public during a series of televised fireside chats. (Credit: Library of Congress)
Towering retorts cast a shadow across tract C-b in Rio Blanco County, Colorado, in November 1979. (Credit: USGS)
The Second Boom
Exxon’s Colony Project

Aerial view of the new town of Battlement Mesa under construction in Garfield County, Colorado, in August 1981. (Credit: USGS)
The Black Sunday Bust
May 2, 1982

Thousands of people left Shale Country. Within a week of Black Sunday, there were no more trucks or trailers left to rent.

(Credit: adlads.wordpress.com)
Finding the Right Pace

“Have you been waiting long?”
“That’s the last time he’ll disseminate disparaging remarks and slanderous disinformation through out-of-context misquoting in this town.”
“Well, get some new numbers or I’m getting a new numbers guy.”
"I prefer shepherding one big sheep rather than a lot of little ones."
The older I get, the faster time seems to pass. That's just one more side effect of global warming.
“How am I supposed to think about consequences before they happen?”
"Let's try it again. This time with a tad less mania."
“At least we agree to disagree.”
“Could I ask you two to move closer together?”
“Sometimes I think the collaborative process would work better without you.”
"Why should I do anything for posterity? What has posterity ever done for me?"